

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An image pick-up device comprising:

image signal generation means for generating an image signal of a variable frame-rate picked-up image;

signal-recording-and-reproducing means for recording and reproducing the image signal;

frame rate conversion means for converting frame rates of the image signal generated by the image signal generation means and the image signal reproduced by the signal-recording-and-reproducing means into a display frame rate;

frame addition processing means for continuously varying the frame rates of the image signal;

monitor image signal generation means for generating a monitor image signal using an image signal having the display frame rate set by the frame rate conversion means and varied by the frame addition processing means; and

control means for controlling operations of the image signal generation means and the signal-recording-and-reproducing means,

wherein the frame addition processing means adds a predetermined number of frames to the image data.

wherein the frame addition processing means varies the frame rates of the image signal to any integer by adding frames to the image data and by changing an image pick-up frame rate.

wherein if it is instructed to reproduce the image signal recorded in the signal-recording-and-reproducing means during recording of the image signal, the control means causes the signal-recording-and-reproducing means to reproduce the recorded image signal at a reproduction frame rate and the control means causes the monitor image signal generation means to generate the monitor image signal that displays simultaneously on one screen a picked-up image based on the image signal generated by the image signal generation means and a reproduced image based on the image signal reproduced by the signal-recording-and-reproducing means.

2. (Previously Presented) The image pick-up device according to claim 1, wherein when image confirmation is performed as the reproduction instruction, the control means sets a position that is ahead of a recording position where the image confirmation is performed by a preset number of frames, as a reproduction start position of the signal-recording-and-reproducing means.

3. (Previously Presented) The image pick-up device according to claim 1, wherein the control means uses a change in frame rate of the variable frame-rate picked-up image as the reproduction instruction, to set a range from a recording position where the change is made to a position that is distant from this recording position by a preset number of frames, as

a reproduction position which is used by the signal-recording-and-reproducing means.

4. (Original) The image pick-up device according to claim 3, wherein if a post-change variable frame rate is higher than the reproduction frame rate, the control means causes the signal-recording-and-reproducing means to start reproduction together with the reproduction instruction and, if the post-change variable frame rate is lower than the reproduction frame rate, delays starting of the reproduction with respect to the reproduction instruction in accordance with the post-change variable frame rate.

5. (Currently Amended) An image pick-up device that is connected to a signal-recording-and-reproducing device, the image pick-up device comprising:

image signal generation means for generating an image signal of a variable frame-rate picked-up image;

frame rate conversion means for converting frame rates of the image signal generated by the image signal generation means and an image signal supplied from the signal-recording-and-reproducing device into a display frame rate;

frame addition processing means for continuously varying the frame rates of the image signal;

monitor image signal generation means for generating a monitor image signal using an image signal having the display frame rate set by the frame rate conversion means and varied by the frame addition processing means; and

control means for controlling operations of the image signal generation means and the signal-recording-and-reproducing device,

wherein the frame addition processing means adds a predetermined number of frames to the image data,

wherein the frame addition processing means varies the frame rates of the image signal to any integer by adding frames to the image data and by changing an image pick-up frame rate,

wherein if it is instructed to reproduce the image signal recorded in the signal-recording-and-reproducing means during recording of the image signal, the control means causes the signal-recording-and-reproducing device to reproduce the recorded image signal at a reproduction frame rate and the control means causes the monitor image signal generation means to generate the monitor image signal that displays simultaneously on one screen a picked-up image based on the image signal generated by the image signal generation means and a reproduced image based on the image signal reproduced by the signal-recording-and-reproducing device.

6. (Previously Presented) The image pick-up device according to claim 5, wherein when image confirmation is performed as the reproduction instruction, the control means sets a position that is ahead of a recording position where the image confirmation is performed by a preset number of frames, as a reproduction start position in the signal-recording-and-reproducing device.

7. (Previously Presented) The image pick-up device according to claim 5, wherein the control means uses a change in frame rate of the variable frame-rate picked-up image as the reproduction instruction, to set a range from a recording position where this change is made to a position that is distant from the recording position by a preset number of frames, as a reproduction position in the signal-recording-and-reproducing device.

8. (Original) The image pick-up device according to claim 7, wherein if a post-change variable frame rate is higher than the reproduction frame rate, the control means causes the signal-recording-and-reproducing device to start reproduction together with the reproduction instruction and,

if the post-change variable frame rate is lower than the reproduction frame rate, delays starting of the reproduction with respect to the reproduction instruction in accordance with the post-change variable frame rate.

9. (Currently Amended) An image pick-up device comprising:
an image signal generation portion that generates an image signal of a variable frame-rate picked-up image;
a signal-recording-and-reproducing portion that records and reproduces the image signal;
a frame rate conversion portion that converts frame rates of the image signal generated by the image signal generation portion and the image signal reproduced by the signal-recording-and-reproduction portion into a display frame rate;

frame addition processing portion that continuously varies the frame rates of the image signal;

a monitor image signal generation portion that generates a monitor image signal using an image signal having the display frame rate set by the frame rate conversion portion and varied by the frame addition processing portion; and

a controller that controls operations of the image signal generation portion and the signal-recording-and-reproducing portion,

wherein the frame addition processing portion adds a predetermined number of frames to the image data,

wherein the frame addition processing portion varies the frame rates of the image signal to any integer by adding frames to the image data and by changing an image pick-up frame rate,

wherein if it is instructed to reproduce the image signal recorded in the signal-recording-and-reproducing portion during recording of the image signal, the controller causes the signal-recording-and-reproducing portion to reproduce the recorded image signal at a reproduction frame rate and the controller causes the monitor image signal generation portion to generate the monitor image signal that displays simultaneously on one screen a picked-up image based on the image signal generated by the image signal generation portion and a reproduced image based on the image signal reproduced by the signal-recording-and-reproducing portion.